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(54) GALLIUM NITRIDE COMPOUND
SEMICONDUCTOR DEVICE

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(57) Abstract:

PROBLEM TO BE SOLVED: To provide a gallium nitride compound semiconductor device, having large luminous intensity and a long lifetime.

SOLUTION: An electrode connected to a contact layer 107 is formed of a first metal layer 108 connected with the contact layer 107 on the p-type semiconductor side and consisting of silver (Ag), etc., and a second metal layer 110 covering the surface of the first metal layer 108 and the surface of the contact layer 107 which is not covered with the first metal layer 108 is formed. The value of contact resistance per unit area to the contact layer 107 of the second metal layer 110 is made larger than that of the first metal layer 108. Junction strength to the contact layer 107 is reinforced by forming the first metal layer 108 or the second metal layer 110 into a multilayered structure by plural kinds of metals. A light-emitting element having high reflection efficiency of light by the electrode and long lifetime is obtained by these means.

